

CLAIMS

- 1 1 A system comprising:
- 2 a processor with an adjustable supply voltage;
- 3 at least one temperature sensor, coupled to the processor to sense a temperature of the
- 4 processor;
- 5 the system to adjust the processor's supply voltage to an acceptably low supply voltage
- 6 based at least in part on the processor's sensed temperature and a sensed clock frequency
- 7 of the processor; and
- 8 a flash memory to store a plurality of the acceptably low supply voltages for the
- 9 processor based at least in part on the processor's sensed clock frequency and the
- 10 processor's sensed temperature
- 1 2. The system of claim 1 wherein the system is coupled to a power source integrated with a
- 2 power controller.
- 1 3. The system of claim 1 wherein the temperature sensor is integrated with the processor.
- 1 4. The system of claim 1 wherein the temperature sensor is attached to a ceramic package of
- 2 the processor.
- 1 5. The system of claim 1 wherein the temperature sensor is located within zero to seven centimeters
- 2 of the processor.

1 6. The system of claim 1 wherein the system comprises at least one of a personal digital
2 assistant, a cell phone, an Internet tablet, or a personal computer.

1 7. An article comprising:

2 a storage medium having stored thereon instructions, that, when executed by a computing
3 platform, result in execution of adjusting a supply voltage to a system's processor by:

4 sensing the system processor's temperature;

5 storing a plurality of acceptably low supply voltages based at least in part on the processor's
6 sensed temperature and the processor's sensed clock frequency; and

7 generating a command to adjust the system's supply voltage to approximately the acceptably
8 low supply voltage.

1 8. The article of claim 7, wherein said storing the plurality of acceptably low supply
2 voltages comprises writing the acceptably low supply voltage to a flash memory.

1 9. The article of claim 7, wherein said generating a command comprises transmitting the
2 command from the system processor to a power source.

1 10. The article of claim 7, wherein said generating a command comprises transmitting the
2 command from a power controller to a power source.

1 11. The article of claim 7, wherein the system comprises at least one of a personal digital
2 assistant, a cell phone, an Internet tablet, or a personal computer.

1 12. A method of adjusting a voltage level to a processor comprising:
2 sensing a temperature and a clock frequency of the processor;
3 comparing the processor's sensed temperature and the processor's clock frequency to a
4 table of data of an acceptably low voltage level for a plurality of processor's sensed
5 temperatures and processor's sensed clock frequencies; and
6 adjusting the voltage level of the processor to the acceptably low voltage level based at
7 least in part on the processor's sensed temperature and the processor's sensed clock
8 frequenc

1 13. The method of claim 12 further comprising storing the table of data in a flash memory.

1 14. The method of claim 12 wherein adjusting the voltage level comprises generating a set
2 voltage command.

1 15. The method of claim 14 wherein generating the set voltage command comprises
2 transmitting the set voltage command to a power source.